MENT BOOK

Dimensions			Contents	Reference to last Measurement
ength 4	Breadth 5	Depth 6	7	8

First & Final Bill

SBR NO-35/15-16

RO! 30-H-15

M. A. R. 57 (Rule 116)
Measurement Book

BR- 50/2-5-15

No. B

Serial No. 259062

Name of Work Construction of rain water Harvesting (main tank) to Govt School Building at Doddabommasandra and Ramachandrapura in Ward No-10.

Name of Contractor or nature of Agency Building at Ramachandrapura and Yelumandamma Badavane Sri. Shankareddy. K.

Date of commencement of work

Date 1	Full description, etc, of work 2	Dimensions Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Work Code NO:- 010-12-000014.						
	Agreement NO:- 358 Dated 24/03/2015.						
	Work order NO:- EE/BTP/BBMP/E-PMT/358/358/2014-15. Of 24/03/2015.						
	Address of Agency:- #3, 1st cross, 1st main, ramachandrappa Layout veerama, palya, Bangalore-45.						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	1) Earth work excavation for foundation of buildings, Culverts, water supply Sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width in Hard soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with (Cool upto 50%						
	Main Tank						
	Flush Lock & Bed Filter Tank	L	4.00	4.00	1.50	= 24.00 cum	
	For CC Drain	L	2.60	1.65	0.80	= 3.86 cum	
		L	30.00	1.00	0.90	= 27.00 cum	
		L	30.00	1.00	0.90	= 27.00 cum	
		L	18.50	1.00	0.90	= 16.65 cum	
		L	30.00	1.00	0.90	= 27.00 cum	
		L	10.00	1.00	0.90	= 9.00 cum	
					Total =	134.51 cum	

Serial No. .....

Name of Work .....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work
1	2
	2) For main Tank Above 1.5m to Depth Add 25% Extra
	3) providing and filling in down Size, with approve cost of all materials a
	Main Tank

BOOK

s		Contents	Reference to last Measurement
adth 5	Depth 6	7	8
uildings, Culverts water supply			
er in pits or in trenches			
t exceeding 1.5m in depth			
f pits and trenches, stacking			
avation with lead upto 50m			
00	1.50 =	24.00 cum	
5	0.80 =	3.86 cum	
0	0.90 =	27.00 cum	
00	0.90 =	27.00 cum	
00	0.90 =	16.65 cum	
00	0.90 =	27.00 cum	
00	0.90 =	9.00 cum	
	Total =	134.51 cum	

M. A. R. 57 (Rule 116)
Measurement Book

No. B

Serial No. .....

259063

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
		Qty limited to Tender			=	134.06 cum	
		@ RS 257.10				RS 34467.00	
	2) For main Tank Above 1.5m Depth Add 25% Extra	1	4.00	4.00	1.10 =	17.60 cum	
		@ RS 321.38				RS 5656.00	
	3) Providing and filling in foundation with granite / trap broken metal 100mm and down size, with approved Sand including hand packing, rammering, watering, including cost of all materials and labour with all lead and lift etc						
	Main Tank	1	3.90	3.90	0.20 =	3.04 cum	
		@ RS	1906.76			RS 5800.00	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
4)	Providing and laying in position Plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs with 40mm and down size graded granite metal coarse aggregates @ 0.8 Cum and fine aggregation machine mixed concrete laid in layers not exceeding 15cms thick well compacted, in foundation and plinth, including cost of all materials, labour.						
	Main Tank						
	Flush Lock & Bed Filter Tank	1	3.90	3.90	0.15 =	2.28 cum	
		1	2.60	1.65	0.15 =	0.64 cum	
	For CC Drain	1	30.00	1.00	0.15 =	4.50 cum	
		1	30.00	1.00	0.15 =	4.50 cum	
		1	18.50	1.00	0.15 =	2.78 cum	
		1	30.00	1.00	0.15 =	4.50 cum	
		1	10.00	1.00	0.15 =	1.50 cum	
					Total =	20.70 cum	

M. A
M

Serial No. .....
Name of Work ..... Fro
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Number
1	2	3
		Qty @ R
5)	providing and constructing burn modular bricks of Standard with cement mortar 1:4 for materials, labour charges, Sca	
	Tank	2x1
		2x1
	Flush Lock & Bed Filter Tank	2x1
		3x1

BOOK

Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
		ement Concrete of mix 1:4:8	
		l down size graded granite	
		fine aggregation machine mixed	
		nd thick well compacted, in	
		all materials, labour.	
90	0.15 =	2.28 cum	
65	0.15 =	0.64 cum	
00	0.15 =	4.50 cum	
00	0.15 =	4.50 cum	
00	0.15 =	2.78 cum	
.00	0.15 =	4.50 cum	
.00	0.15 =	1.80 cum	
	Total =	20.70 cum	

M. A. R. 57 (Rule 116)
Measurement Book

No. B

259064

Serial No. ..... From..... To.....

Name of Work .....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
		Qty limited to Tender =				20.63 cum	
		@ Rs 4709.43				Rs 97156.00	
	5) providing and constructing burnt brick masonary with approved quality of modular bricks of Standard size of class designation 50 (table moulded) with cement mortar 1:4 for basement and superstructure including cost of materials, labour charges, scaffolding, curing etc						
	Tank						
		2x1	3.90	0.23	1.95 =	3.50 cum	
		2x1	3.44	0.23	1.95 =	3.09 cum	
		2x1	2.30	0.23	0.90 =	0.95 cum	
	Flyash locked Bed Filter Tank	3x1	0.90	0.23	0.90 =	0.56 cum	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
					Total =	8.10 Cum	
		@ RS 6531.03				RS 52869.00	
6)	providing and removing centering, Shuttering, Struthing, propping etc and removal of form work for flat surface such of roofs, landings balconies and likes, thickness upto 200mm including cost of all materials labour etc.						
	Main Tank						
		1	3.44	3.44	=	11.83 Sqm	
	Filter Tank	1	1.90	0.90	=	1.71 Sqm	
	CC Drain						
		4	30.00		0.60 =	72.00 Sqm	
		4	30.00		0.60 =	72.00 Sqm	
		4	18.50		0.60 =	44.40 Sqm	
		4	30.00		0.60 =	72.00 Sqm	
		4	30.00		0.60 =	72.00 Sqm	

Serial No. .....

Name of Work .....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Nur
1	2	
	7) Providing and laying in pos with OPC cement @ 320kgs co Coarse aggregate machine m thick, vibrated for all works roof Slabs Staircase lintels Columns, Piers abutments p	

OOK

Depth 6	Contents 7	Reference to last Measurement 8
	oftal = 8.10 Cum	
		RS 5286.00
	Struttng, propping etc Such of roofs, landings ncluding cost of all	
	= 11.83 Sqm	
	= 1.71 Sqm	
	0.60 = 72.00 Sqm	
	0.60 = 72.00 Sqm	
	0.60 = 144.00 Sqm	
	0.60 = 72.00 Sqm	
	0.60 = 72.00 Sqm	

M. A. R. 57 (Rule 116)
Measurement Book

No. B

259065

Serial No. .....

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
		4	10.00		0.60 =	24.00 Sqm	
					Total =	287.94 Sqm	
		Qty limited to Tender =				286.74 Sqm	
		@ RS 304.92					RS 90482.00
	7) Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320kgs/cum with 20mm and down size graded granite metal, Coarse aggregate machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof Slabs Staircase lintels retaining walls including attached Plasters Columns, Piers abutments pillars, Poitu. Struts including cost of all materials						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Raft	1	3.90	3.90	0.15 =	2.28 Cum	
	Roof Slab	1	3.90	3.90	0.15 =	2.28 Cum	
	Flush and Filter tank Roof Slab	1	2.30	1.35	0.15 =	0.47 Cum	
	CC Drain Bottom	1	30.00	0.90	0.15 =	4.05 Cum	
		1	30.00	0.90	0.15 =	4.05 Cum	
		1	18.50	0.90	0.15 =	2.50 Cum	
		1	30.00	0.90	0.15 =	4.05 Cum	
		1	10.00	0.90	0.15 =	1.35 Cum	
	Side wall	2	30.00	0.15	0.55 =	4.95 Cum	
		2	30.00	0.15	0.60 =	5.40 Cum	
		2	18.50	0.15	0.65 =	3.61 Cum	
		2	30.00	0.15	0.60 =	5.40 Cum	
		2	10.00	0.15	0.65 =	1.95 Cum	
	Deduct for openings	1x3	0.60	0.60	0.15 =	-0.16 Cum	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	N
1	2	
	8) Providing mild steel reinforcement cutting, bending, hooking as required, tying with binding wire wherever necessary complete Qty vide page No - of this MB No -	Qty

h	Contents 7	Reference to last Measurement 8
=	2.28 Cum	
=	2.28 Cum	
=	0.47 Cum	
=	4.05 Cum	
=	4.05 Cum	
=	2.50 Cum	
=	4.05 Cum	
=	1.35 Cum	
=	4.95 Cum	
=	5.40 Cum	
=	3.61 Cum	
=	5.40 Cum	
=	1.95 Cum	
=	-0.18 Cum	

Cbfc
2/4/2015

M. A. R. 57 (Rule 116)
Measurement Book

No. B

259066

Serial No. .....

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
					Total =	42.17 Cum	
		Qty limited to Tender			=	42.04 Cum	
		@ Rs 5892.48				Rs 247720.00	
	8) Providing mild steel reinforcement for R.C.C work including straightening cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design.						
	Qty vide page No - of this MB No - 4591					= 37.83 Mt	
		@ Rs 7749.82				Rs 293176.00	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
9)	providing and fixing plaster resh 200mm wide manufactured out of hot dipped galvanished iron of nominal thickness 0.35mm with a Zinc coating of 120gms per sqmt width, along route of walls chipped for services, junctions between and brick walls including cost materials, labour, for fixing complete as per specification						
	Length 2x(1.85/0.20) = 18.5say = 19 Nos	1x19	3.44			= 65.36 sqmt	
	width 2x(1.85/0.20) = 18.5say = 19 Nos	1x19	3.44			= 65.36 sqmt	
						Total = 130.72 sqmt	
		@ RS 47.22					RS 6173.00

Serial No. .....

Name of Work .....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Num
1	2	3
10)	providing 15mm thick cement to brick masonary including rendering providing and reno	
	Main Tank inside wall	1x2
		1x
	Filter Tank	1x2
		1x2
	out Side Plastering for Filter Tank	1x2
		1x2

Contents	Reference to last Measurement
7	8
factored out of .35m with a route of walls walls including Pelifocoating	
65.36 Sqmt	
65.36 Sqmt	
130.72 Sqmt	
RS 6173.00	

M. A. R. 57 (Rule 116)
Measurement Book

No. B

259067

Serial No. .....

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
10)	providing 15mm thick Cement Plaster in Single Coat with Cement mortar 1:3 to brick masonary including roundings off corners wherever required Smooth rendering providing and removing scaffolding, including cost of materials.						
	Main Tank inside wall	1x2	3.44		1.95 =	13.42 Sqmt	
		1x2	3.44		1.95 =	13.42 Sqmt	
	Filter Tank	1x2	0.90	0.90	0.9 =	1.62 Sqmt	
		1x2	0.90	0.90	=	1.62 Sqmt	
	out Side Plastering for Filter Tank	1x2	2.30		0.90 =	4.14 Sqmt	
		1x2	1.35		0.90 =	2.43 Sqmt	
					Total =	36.64 Sqmt	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	@ RS 194.14					RS 7114.00	
11)	Extra for providing and mixing water proofing compound in cement plaster work at one kg per bag or in the proportion recommended by the manufacturer, for cement mortar 1:3 20mm thick cost of materials.					= 36.64 Sqm	
	Qty vide Item No - 10						
	@ RS 12.87					RS 472.00	
12)	providing 20mm thick cement plaster in single coat with cement mortar 1:3 to stone masonary & concrete surface including rounding off corners, wherever required smooth rendering, providing and removing scaffolding including cost of materials, labour, curing etc,						

M.

Serial No. .....

Name of Work ..... F

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Numb
1	2	3
	Main Tank Top	L
	Filter Tank Top	L
		@
13)	Supply and providing Aggre	
		L
		@
14)	Supply and providing Aggr	
		L

Reference to last Measurement 8
7114.00
on cement recommended cost of
Sqm
RS 1172.00
with cement bbly rounding and removing etc,

M. A. R. 57 (Rule 116)
Measurement Book

No. B

259068

Serial No. .....

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Main Tank Top	1	3.90	3.90		= 15.21 Sqm	
	Filter Tank Top	1	2.30	1.35		= 3.11 Sqm	
					Total =	18.32 Sqm	
		@ RS 248.61					RS 4517.00
13)	Supply and providing Aggregate 40mm and below.	1	0.90	0.90	0.20 =	0.16 Cum	
		@ RS 792.00					RS 128.00
14)	Supply and providing Aggregate 20mm and below	1	0.90	0.90	0.20 =	0.16 Cum	

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
		@ RS 990.00				RS 160.00	
15)	Supply and providing Sand	L	0.90	0.90	0.20 =	0.16 cum	
		@ RS 1435.50				RS 233.00	
16)	providing pvc Rain water pipes and fitting ISI standard 4" Single socket Pipe 110mm dia	L	100.00	@ RS 858.33/Rmt		RS 85833.00	
17)	Providing pvc Rain water pipes special (with)						
	plain Bend	1x13 no	@ RS 159.39/each			RS 2072.07	
	plain Tee	1x18 no	@ RS 339.57/each			RS 2716.00	

M.

Serial No. .....

Name of Work ..... F

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date 1	Full description, etc, of work 2	Numb 3
18)	1 HP Submersible centrifug	
	necessary fittings) includi	
	Electronic Automatic Equ	
	1L RQ	
19)	Relevent plumbing acces	sories
	Filter etc complete	1 no

Contents 7	Reference to last Measurement 8
	RS 160.00
0.10 cum	
	RS 233.00
ISI standard 9"	
.33 Rmt	RS 85833.00
1)	
1 each	RS 2072.07
1 each	RS 2716.00

M. A. R. 57 (Rule 116)
Measurement Book

No. B

259069

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
18)	1HP Submersible centrifugal force pump of approved make with all necessary fittings including wiring Switch board, Starter etc, and Electronic Automatic Equipment (Programmable Logic control)	1 Nos @ RS 17820.00				RS 17820.00	
19)	Relevent plumbing accessories for inlet and outlet with out FFL including Filter etc complete	1 no @ RS 8910				RS 8910.00	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
20)	Square Tank Cover (CI) ISI marked 24"x24" PT looky pattern						
		23 Nos @ Rs 4958.91				Rs	114077.00
21)	Add 1% for third Party Charges					Rs	9784.00
						Total Rs	988133.63
		Certified that the work is executed as per the above measurements				Zadhav	~~Rs 8300~~
						AE 30/4/2015.	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work
1	2
	Certificate:
	certified that the work executed as per the above measurements and issued from Zadhav
	AE 30/4/2015

ontents 7	Reference to last Measurement 8
ky dor cwlogw	
RS 14877.00	
RS 9784.00	
tal RS 988135.63	
dhav	978300=00
AE 30/4/2015.	

M. A. R. 57 (Rule 116)

Measurement Book

No. B

259070

Serial No. .....

Name of Work ..... From ..... To .....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date 1	Full description, etc, of work 2	Number 3	Dimensions Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Certificate:- certified that the above work done satisfactory and no-Mater-al issued from departmentally Zadhav AE 30/4/2015.						

978300=

120296=00

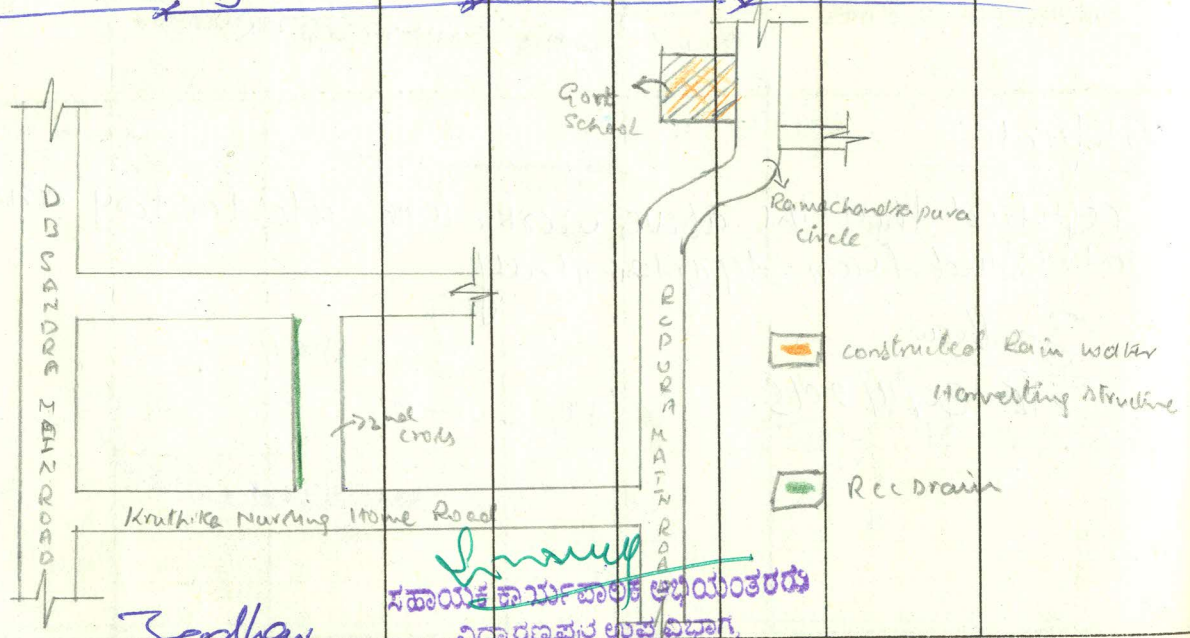
858004=00

Assistant Executive Engineer
Vidyaranyapura Sub Division
BMP Bangalore-97

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8

Sketch Showing the location of work done Spot



Jeevan
AE

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ನಿರ್ವಹಣಾಪುರ ಉಪ ವಿಭಾಗ,
ಯಲಹಂಕ ವಲಯ,